

## 1    **ABSTRACT OF THE DISCLOSURE**

2            A pedometer for detecting vibrations in a direction of motion is  
3 disclosed. The architecture of the device includes a main body, a vibration  
4 detector, and a counting circuit. The counting circuit is connected to the  
5 vibration detector and the counting circuit and vibration detector are installed  
6 inside the main body. Since the vibration detector is disposed orthogonal to the  
7 direction of motion, the vibration detector is able to detect the smallest  
8 vibration in the direction of motion and outputs a pulse signal to the counting  
9 circuit. The counting circuit includes a signal amplifier circuit, a signal  
10 detection circuit , and a processor. This pedometer is capable of picking up  
11 weak vibration signals to take an accurate count of the jogger's pace.